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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/619,363	07/19/2000	Leonard George Bleile	B-3973-618064-6	2189

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EXAMINER	
LEI, TSULEUN R	

ART UNIT	PAPER NUMBER
2686	7

DATE MAILED: 07/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/619,363	BLEILE ET AL.
	Examiner	Art Unit
	TSULEUN R. LEI	2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 April 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-56* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-56* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4-7, 9-10, 15-17, 19-28, 30, 33-38, 43-54 and 56 are rejected under 35 U.S.C. 102(b) as being anticipated by Blust et al. (U.S. Patent 5,544,227).

Regarding Claim 1, Blust teaches a communications unit comprising: a) a first wireless transceiver port operable to communicate with a first wireless transceiver (Fig.1, RADIO PHONE 301C) operable to conduct wireless communications with a wireless base station (Fig.1, CELL SITE 302A); and b) a first expansion interface (Fig.1, CELLULAR INTERFACE 400) in communication with said first wireless transceiver port and operable to communicate with a second communications unit (Fig.1, 301D and 800) on a plurality of communications channels (Fig.1, 501 and 502; Col.6, Line 11, trunk circuit), to permit said second communications unit to access the first wireless transceiver (Co.5, Lines 41-67).

Regarding Claim 4, Blust teaches the communications unit of claim 1 wherein said first wireless transceiver port and said first expansion interface are on a common base (Fig.10. wherein the transceiver port CIU 402I and the first expansion interface shown as the rest of the circuit in 400 are on a common base).

Regarding Claim 5, Blust teaches the communications unit of claim 1 wherein said first expansion interface is operable to conduct simultaneous communications with said second communications unit on said plurality of communications channels (Fig.1, 501 & 502; Col.5, Lines 50-67).

Regarding Claim 6, Blust teaches the communications unit of claim 5 further comprising a first communications appliance interface (Fig.1, PBX 500) operable to selectively communicate with at least one of the first wireless transceiver and said first expansion interface, to permit a communications appliance connected to said first communications appliance interface to communicate with the wireless base station or another communications unit in communication with said first expansion interface (Col.5, Lines 41-67).

Regarding Claim 7, Blust teaches the communications unit of claim 6 wherein said first communications appliance interface includes an analog telephone interface (Fig.1, PBX 500 and telephone 601A).

Regarding Claim 9, Blust teaches the communications unit of claim 6 wherein said first expansion interface and said first communications appliance interface are selectively operable to use said first wireless transceiver port (Col.5, Lines 41-67).

Regarding Claim 10, Blust teaches the communications unit of claim 6 wherein said first expansion interface is operable to support independent communications between another communications unit and the wireless transceiver while supporting independent communications between another communications unit and said first communication appliance interface (Col.6, Lines 3-22; Col.5, Lines 41-49).

Regarding Claim 15, Blust teaches the communications unit of claim 1 wherein said first expansion interface comprises a bus interface (Col.6, Lines 11-22. It is inherent that trunk circuit comprises bus interface).

Regarding Claim 16, Blust teaches the communications unit of claim 15 wherein said bus interface includes a Pulse Code Modulation bus interface (Col.6, Line 15, digital multiplexed. It is inherent that digital multiplex include Pulse Code Modulation bus interface.).

Regarding Claim 17, Blust teaches the communications unit of claim 1 wherein said first wireless transceiver port includes a receptacle operable to receive and hold a wireless telephone (Fig.10, CIU 402I; Col.6, Lines 53-56, handset jack).

Regarding Claim 19, Blust teaches the communications unit of claim 1 wherein said expansion interface is operable to communicate with a plurality of other communications units (Fig.1, 301C and 301D).

Regarding Claim 20, Blust teaches the communications unit of claim 1 further comprising a processor circuit (Fig.10, CPU 402J; Col.6, Lines 23-30 programmed to effect communications between said first wireless transceiver port and said first expansion interface.

Regarding Claim 21, Blust teaches the communications unit of claim 20 further comprising a communications appliance interface, said processor circuit being operable to effect communications between said first wireless transceiver port, said first expansion interface and said communications appliance interface (Fig.1, PBX 500; Col.5, Lines 41-67).

Regarding Claim 22, Blust teaches the communications unit of claim 21 wherein said processor circuit is programmed to receive dialed digits (Col.6, Line 59, DTMF; Col.6, Line 17 DTMF, dial pulse) from said communications appliance interface and communicate said dialed digits to said first wireless transceiver port to cause a transceiver in communication with said first wireless transceiver port to dial said dialed digits on a wireless network.

Regarding Claim 23, Blust teaches the communications unit of claim 22 wherein said processor circuit is programmed to communicate said dialed digits to said first wireless transceiver interface in response to a change in the rate at which dialed digits are received at said

communications appliance interface (Col.6, Line 12, standard telephone trunk circuit; Col.6, Line 14, conventional types of supervision. It is inherent that conventional types of supervision includes the function of responding to a change in the rate at which dialed digits are received at said communication appliance interface, as the case of changing from manual dialing to automatic speed dialing wherein the rate of dialing digits is different.).

Regarding Claim 24, Blust teaches the communications unit of claim 23 wherein said processor circuit is programmed to communicate said dialed digits to said first wireless transceiver interface in response to expiry of a timeout period after entry of said dialed digits at said communications appliance (Col.6, Line 12, standard telephone trunk circuit; Col.6, Line 14, conventional types of supervision. It is inherent that conventional types of supervision includes the function of time out after entry of dialed digits at the communication appliance, as the case of most of the standard telephone services.).

Regarding Claim 25, see Claim 1 for Blust's teaching.

Regarding Claim 26, see Claim 6 for Blust's teaching.

Regarding Claim 27, Blust teaches the system of claim 26 wherein at least some of the communications units have respective wireless transceiver ports operable to be accessed by any of said communications appliance interfaces (Fig.1, Fig.10, PBX and Cellular Interface).

Regarding Claim 28, Blust teaches the system of claim 27 wherein any of said communications appliance interfaces can access any of said wireless transceivers, through respective expansion interfaces on respective communications units on which said any of said communications appliances are located and respective communications units on which any of said wireless transceivers are located (Col.6, Lines 3-22; Col.5, Lines 41-67).

Regarding Claim 30, see Claim 1 for Blust's teaching.

Regarding Claim 33, see Claim 4 for Blust's teaching.

Regarding Claim 34, see Claim 5 for Blust's teaching.

Regarding Claim 35, see Claim 6 for Blust's teaching.

Regarding Claim 36, see Claim 7 for Blust's teaching.

Regarding Claim 37, see Claim 9 for Blust's teaching.

Regarding Claim 38, see Claim 10 for Blust's teaching.

Regarding Claim 43, see Claim 15 for Blust's teaching.

Regarding Claim 44, see Claim 16 for Blust's teaching.

Regarding Claim 45, see Claim 17 for Blust's teaching.

Regarding Claim 46, see Claim 18 for Blust's teaching.

Regarding Claim 47, see Claim 19 for Blust's teaching.

Regarding Claim 48, see Claim 22 for Blust's teaching.

Regarding Claim 49, see Claim 23 for Blust's teaching.

Regarding Claim 50, see Claim 24 for Blust's teaching.

Regarding Claim 51, see Claim 1 for Blust's teaching.

Regarding Claim 52, see Claims 5 and 6 for Blust's teaching.

Regarding Claim 53, see Claims 5 and 6 for Blust's teaching.

Regarding Claim 54, see Claims 5 and 6 for Blust's teaching.

Regarding Claim 56, Blust teaches the communications unit of Claim 1 wherein said first wireless transceiver port is operable to communicate with a first wireless transceiver operable to conduct wireless communications with a wireless base station of a public network (Fig.1, Cell Site 302A, PSTN 200.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 2, 3, 8, 11-14, 18, 29, 31, 32, 39-42 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blust et al. (U.S. Patent 5,544,227).

Regarding Claim 2, Blust teaches the communications unit of claim 1 wherein said first expansion interface is operable to conduct communications with said second communications unit on multiplexed channels (Col.6, Line 15, digital multiplexed). Blust does not teach time multiplexed channels. However, time multiplexed technique is well know in the telecommunications field. Therefore, it would have been obvious for one of ordinary skill in the

art at the time the invention was made to have included the time multiplexed channel in the communication unit taught by Blust in order to utilize the trunk circuit more efficiently.

Regarding Claim 3, Blust teaches the communications unit of claim 1 wherein said expansion interface is operable to conduct communications with the second communications unit on multiplexed channels (Col.6, Line 15, digital multiplexed). Blust does not teach frequency multiplexed channels. However, frequency multiplexed technique is well know in the telecommunications field. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have included the frequency multiplexed channel in the communication unit taught by Blust in order to simplify the design of the trunk circuit.

Regarding Claim 8, Blust teaches the communications unit of claim 6 comprising said first wireless transceiver port, said first communications appliance interface and said first expansion interface (Fig.1). Blust does not teach that they are contained within a common base. However, it is obvious that these units can all be housed within a common base. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have made the communication unit taught by Blust all contained within a common base in order to simplify the circuit design and to save cost.

Regarding Claim 11, Blust teaches the communications unit of claim 6, but is silent on that the first expansion interface is programmable by command received at the communications appliance interface. However, Blust teaches a PBX 500, and PBX is designed to be

programmable through various ports, and the telephone input port is one of the ports through which the PBX can be programmed. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have the PBX 500 programmable by commands received at the communications appliance interface in order to provide programming flexibility to the system taught by Blust.

Regarding Claim 12, Blust teaches the communications unit of claim 1, but is silent on that the first expansion interface is programmable by command received from at least one of said first wireless transceiver port and said second communications unit. However, Blust teaches a PBX 500, and PBX is designed to be programmable through various ports, and the wireless transceiver port 501 and a second communications unit 502 are some of the ports through which the PBX can be programmed. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have the PBX 500 programmable by commands received from at least one of the first wireless transceiver port and the second communication unit in order to provide programming flexibility to the system taught by Blust.

Regarding Claim 13, Blust teaches the communications unit of claim 12 wherein said first expansion interface is programmable (Blust, Col.6, Lines 27 & 28, software control and DSPS) to cause said first wireless transceiver port to selectively communicate with one of a plurality of communications units operable to communicate with said first expansion interface.

Regarding Claim 14, see Claim 11 for Blust's teaching.

Regarding Claim 18, Blust teaches the communications unit of claim 1 wherein said first wireless transceiver port is operable to communicate with an interface on a wireless telephone (Fig. 10, 301C and 402I). Blust does not teach communicating with a data interface on a wireless telephone. However, data communication is common with a wireless telephone, and many wireless telephones have data interface readily available. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have included a data interface in the cellular interface unit taught by Blust so that it is flexible in interfacing with wireless telephones.

Regarding Claim 29, see Claims 11-13 for Blust's teaching.

Regarding Claim 31, see Claim 2 for Blust's teaching.

Regarding Claim 32, see Claim 3 for Blust's teaching.

Regarding Claim 39, see Claim 11 for Blust's teaching.

Regarding Claim 40, see Claim 12 for Blust's teaching.

Regarding Claim 41, see Claim 13 for Blust's teaching.

Regarding Claim 42, see Claim 11 for Blust's teaching.

Regarding Claim 55, see Claims 11-13 for Blust's teaching.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TSULEUN R. LEI whose telephone number is 703-305-4828. The examiner can normally be reached on 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D Banks-Harold can be reached on 703-305-4379. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5403 for regular communications and 703-308-5403 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

TRL
July 18, 2003

Marsha D Banks-Harold
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